Amendment to Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A processor comprising:

a control register accessible to an operating system to store a current privilege level to attribute an execution privilege level to ~~for~~ a task for the processor; and

a privilege remapper coupled to the control register and configured to remap ~~the stored~~ a current privilege level stored in the control register for~~of~~ the task by the operation system, to a different current privilege level attributing a different execution privilege level to the task for the processor, the remapping being performed independent of the operating system.

2. (Previously Presented) The processor of claim 1, wherein the privilege remapper comprises a register to store a plurality of remapped current privilege levels to be accessed using the stored current privilege level prior to runtime privilege checking.

3. (Previously Presented) The processor of claim 1, wherein the privilege remapper comprises a storage array to store a plurality of remapped current privilege levels to be accessed using a configuration value and the stored current privilege level prior to runtime privilege checking.

4. (Previously Presented) The processor of claim 1, wherein the privilege remapper comprises one or more logical elements to logically alter one or more bits of the stored current privilege level prior to runtime privilege checking.

5. (Previously Presented) The processor of claim 1, wherein the privilege remapper further comprises at least one selector coupled to at least one of the one or more logical elements to effectuate conditional performance of said logical alteration for at least one bit of the stored current privilege level prior to runtime privilege checking.

6. (Previously Presented) The processor of claim 1, wherein the processor further comprises at least one selector coupled to the control register and the privilege remapper to effectuate conditional performance of said remapping of the stored current privilege level prior to runtime privilege checking.

7. (Currently amended) A method comprising:

~~storing a first current privilege level for a task in~~ accessing a control register of a processor, the control register being also accessible to an operating system and employed by the operating system to store a first current privilege level to attribute an execution privilege level to a task for the processor; and

remapping the first current privilege level to a second current privilege level to attribute a different execution privilege level to the task for the processor, the remapping being performed independent of the operating system~~, prior to runtime privilege checking to effectuate a different execution privilege level for the task~~.

8. (Currently amended) The method of claim 7, wherein said remapping comprises accessing a register to retrieve ~~a selected~~ one of a plurality of remapped current privilege levels stored in said register, using the stored first current privilege level, prior to runtime privilege checking.

9. (Currently amended) The method of claim 7, wherein said remapping comprises accessing a storage array to retrieve ~~a selected~~ one of a plurality of remapped current

privilege levels stored in said storage array in a set-wise manner, using a configuration value and the stored first current privilege level, prior to runtime privilege checking.

10. (Previously presented) The method of claim 7, wherein said remapping comprises logically altering one or more bits of the stored first current privilege level, prior to runtime privilege checking.

11. (Original) The method of claim 10, wherein said altering being conditionally performed.

12. (Previously presented) The method of claim 7, wherein said remapping being conditionally performed.

13. (Previously presented) In a processor having a 4-ring privilege protection scheme, where tasks attributed with a lower ring current privilege level is more privileged than tasks attributed with a higher ring current privilege level, a method comprising:

attributing a ring-2 current privilege level to a first task for an operating system, nominally giving said first task more privilege than a second plurality of tasks which are attributed with a ring-3 current privilege level for an operating system; and

remapping each ring-2 current privilege level to a ring-3 current privilege level, and each ring-3 current privilege level to a ring-2 current privilege level prior to runtime privilege checking to cause said first task to execute in fact with less privileges than said second plurality of tasks, the remapping being performed independent of the operating system.

14. (Original) The method of claim 13, wherein said first task is associated with an Internet application.

15. (Original) The method of claim 13, wherein said second plurality of tasks are associated with an operating system.

16. (Previously presented) A method comprising:

accessing a storage location employed by an operating system to store~~attributing~~ a first current privilege level to attribute a first execution privilege level to a first collection of programming instructions for a~~n operating system~~ processor, said first current privilege level being different from a second current privilege level the operating system stores into the storage location at a different point in time ~~assigned~~ to attribute a second execution privilege level to a second collection of programming instructions for the processor~~operating system~~, resulting in said first collection of programming instructions to be executed by the~~a~~ processor with a first relative current privilege relationship to said second collection of programming instructions ~~at execution time~~; and

remapping said first current privilege level to a third current privilege level ~~prior to runtime privilege checking~~ to cause the first collection of programming instructions to be executed by the processor with a second different relative current privilege relationship to said second collection of programming instructions, the remapping being performed independent of the operating system and prior to runtime privilege checking, the runtime privilege checking being performed prior to the processor executing a collection of programming instructions.

17. (Previously presented) A method comprising:

accessing a storage location employed by an operating system to store~~attributing~~ a first current privilege level to attribute a first execution privilege level to a first collection of programming instructions for a processor, said first current privilege level being different from a second current privilege level stored into the storage location by the operating system at a different point in time to~~assigned~~ attribute a second execution privilege level to a second

collection of programming instructions, to result~~ing~~ in said first collection of programming instructions to be executed by the processor with a first relative current privilege relationship to said second collection of programming instructions ~~at execution time~~; and

remapping said first current privilege level to said second~~a third~~ current privilege level ~~prior to runtime privilege checking~~ to cause the first collection of programming instructions to be executed by the processor with a second different relative current privilege relationship to said second collection of programming instructions, the second current privilege level attributed to said second collection of programming instructions to be remapped to a third current privilege level.~~; and~~

~~said second and third current privilege levels are the same current privilege level, and said method further comprises remapping said second current privilege level of said second collection of programming instructions to a fourth current privilege level prior to runtime privilege checking.~~

18. (Currently amended) The method of claim 17, wherein said first and third~~fourth~~ current privilege levels are the same current privilege level.

19. (Currently amended) A method comprising:

remapping ~~attributing a first~~ more privileged current privilege level attributed by an operating system to a first ~~subset of~~ least privileged task~~s~~ to be executed by a processor ~~attributed with~~to a least privileged current privilege level ~~for an operating system, for~~ prior to the execution of the first least privileged task by the~~a~~ processor; and

~~remapping said first more privileged current privilege level attributed to said first subset of least privileged tasks to said least privileged current privilege level for execution by the processor, and~~ remapping a~~said~~ least privileged current privilege level attributed by an operating system to ~~residual ones of said~~a second least privileged tasks ~~prior to runtime privilege checking to cause said first subset of least privileged tasks~~ to be executed by the

processor to a more privileged current privilege level prior to the execution of the second least privileged task by the processor ~~with lesser privileges than said residual ones of the least privileged tasks, the remapping being performed independent of the operating system~~.

20. (Currently amended) The method of claim 19, wherein the method further comprises the operating system attributing said least privileged current privilege level to said second least privileged task, and said more privileged current privilege level to ~~of said residual ones of~~ said first least privileged task~~s are remapped to said first more privileged current privilege level~~.

21. (Currently amended) A method comprising:

remapping a first lesser privileged current privilege level attributed~~ing a first lesser privileged current privilege level~~ by an operating system to a first ~~subset of~~ most privileged task~~s attributed with~~ to be executed by a processor to a most privileged current privilege level ~~for an operating system, for~~ prior to the execution of the first most privileged task by the~~a~~ processor; and

~~remapping said first lesser privileged current privilege level attributed to said first subset of most privileged tasks to said most privileged current privilege level for execution by the processor, and~~ remapping ~~a~~said most privileged current privilege level attributed by an operating system to ~~residual ones of said~~ a second most privileged task~~s prior to runtime privilege checking to cause said residual ones of the most privileged tasks~~ to be executed by the processor ~~with~~ to a lesser privileged~~s~~ current privilege level, prior to the execution of the second ~~than said first subset of~~ most privileged tasks~~, the remapping being performed independent of the operating system~~.

22. (Currently Amended) The method of claim 21, wherein the method further comprises the operating system attributing said most privileged current privilege level ~~of said residual~~

~~ones of~~ to said second most privileged tasks, and ~~are remapped to~~ said ~~first~~ lesser privileged current privilege level to said first most privileged task.

23. (Currently amended) A processor comprising:

a control register accessible to an operating system to store a current privilege level to attribute an execution privilege level to ~~for~~ a task for ~~, using an instruction of~~ the processor; and

a privilege remapper coupled to the control register and configured to remap a~~the stored~~ current privilege level stored into the control register by the operating system using an instruction of the processor to a different current privilege level, the remapping being performed prior to runtime privilege checking, independent of the operating system, the instruction and the task.

24. (Previously presented) The processor of claim 23, wherein the processor further comprises at least one selector coupled to the control register and the privilege remapper to effectuate conditional performance of said remapping of the stored current privilege level prior to runtime privilege checking.

25. (Currently amended) An apparatus comprising:

a control register accessible to an operating system to store a current privilege level to attribute an execution privilege level to ~~for~~ a task for the processor~~, using an instruction~~; and

a privilege remapper coupled to the control register and configured to remap ~~the storeda~~ current privilege level stored into the control register by the operating system using an instruction to a different current privilege level, the remapping being performed prior to runtime privilege checking, independent of the operating system, the instruction, and the task.

26. (Previously presented) The apparatus of claim 25, wherein the apparatus further comprises at least one selector coupled to the control register and the privilege remapper to effectuate conditional performance of said remapping of the stored current privilege level prior to runtime privilege checking.

27. (New) A method comprising:

remapping a ring-2 current privilege level stored in a storage location by an operating system to attribute an execution privilege level to a first task for a processor having a 4-ring privilege scheme, to a ring-3 current privilege level to attribute a lower execution privilege level to the first task; and

remapping a ring-3 current privilege level stored in a storage location by the operating system to attribute an execution privilege level to a second task for the processor, to a ring-2 current privilege level to attribute a higher execution privilege to the second task;

wherein both remapping are performed independent of the operating system.

28. (New) The method of claim 27, wherein said first task is associated with an Internet application.

29. (New) The method of claim 27, wherein said second task is associated with the operating system.